

## Workshop Overview

The purpose of the workshop is to open a dialogue among industry, government, and the public on developing appropriate strategies for assessing and managing the risks associated with the manufacture, use and ultimate disposition of nanomaterials. The day will be spent providing information so that participants can communicate with each other at the same level, exploring the issues and concerns associated with nanotechnology, and identifying the next steps needed to develop the industry while protecting workers, the public, and the environment. **The Big Picture: Safe Development of Nanotechnology** will feature presentations by nationally-recognized experts on what is needed to address environmental, health and safety issues posed by the use of nanomaterials. Ample time will also be provided for breakout sessions and open discussion on what business and government can do together to ensure that nanotechnology develops safely in Massachusetts.

### At the workshop your business will learn about:

- ◆ Currently available risk assessment tools
- ◆ Best management practices for nanotechnology

### At the workshop you will have a chance to join in open discussion concerning:

- ◆ What is important and feasible to do about environmental, health, and safety (EHS) issues
- ◆ What you think state agencies should know and understand
- ◆ What useful next steps might be possible

### Companies that develop or use nanotechnology are encouraged to:

- ◆ Inform Massachusetts agencies about current practices and how state agencies can mitigate risk concerns and help manufacturers safely develop products using nanotechnology
- ◆ Share concerns about public perception
- ◆ Identify regulatory concerns for both researchers and manufacturers

## Who Should Attend?

- ◆ Research & Development Companies
- ◆ Manufacturers that use nanotechnology in their operations
- ◆ Academic researchers
- ◆ Other stakeholders for the nanotechnology industry including venture capital and law firms

## Registration

Registration Fee \$50

Name \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Email \_\_\_\_\_

Phone \_\_\_\_\_

### Please indicate your professional background:

- ☐ Venture Capital ☐ Consultant ☐ NGO ☐ Industry  
☐ Government ☐ Academic ☐ Legal ☐ Other \_\_\_\_\_

### Please sign me up to earn:

- ☐ 3 TURP Credits

### Please indicate, in order of preference, the breakout session you would like to attend:

- \_\_\_ Workplace Safety  
\_\_\_ Facility Discharges and Emissions  
\_\_\_ Product Safety and Disposition

### Directions to the Workshop

Marriot Courtyard Marlborough  
75 Felton St.  
Marlborough, Massachusetts 01752

#### From Boston:

Take the Massachusetts Turnpike (I-90) West. Take exit 11A (I-495 North) to exit 24B (Route 20 West/Northborough). Take your first right onto Felton St. before the Shell Gas Station. Hotel is on your right.

#### From Worcester:

Take I-290 east until the end then take I-495 South to exit 24B (Route 20 West/Northborough). Take your first right onto Felton St. before the Shell Gas Station. Hotel is on your right.

#### From Western Massachusetts:

Take the Massachusetts Turnpike East (I-90). Take exit 11A (I-495 North) to exit 24B (Route 20 West/Northborough). Take your first right onto Felton St. before the Shell Gas Station. Hotel is on your right.

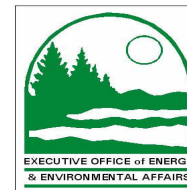
### Please Register by November 9, 2007

To register, complete form and send with check payable to **Environmental Business Council** by November 9, 2007 to:

Environmental Business Council  
18 Tremont St., Ste. 402  
Boston, MA 02108-2301

Online registration with credit card is available :

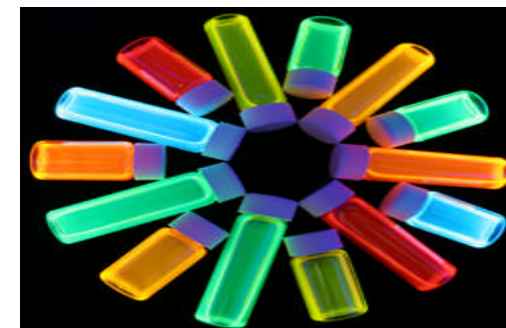
<http://www.ebcne.org/>



The Commonwealth of Massachusetts  
Executive Office of Energy and Environmental Affairs  
Office of Technical Assistance and Technology

*Presents*

## The Big Picture: Safe Development of Nanotechnology



Thursday  
November 15, 2007

Marriott Courtyard  
Marlborough, Massachusetts

### Additional Sponsors:

Environmental Business Council of New England  
Massachusetts Department of Environmental Protection (MassDEP)  
Massachusetts Department of Public Health  
Massachusetts Division of Occupational Safety  
Massachusetts Toxics Use Reduction Institute

Executive Office of Energy and Environmental Affairs  
Office of Technical Assistance and Technology  
100 Cambridge Street, Suite 900  
Boston, MA 02114

# The Big Picture: Safe Development of Nanotechnology

Thursday November 15, 2007 ♦ Marlborough, Massachusetts

## Workshop Agenda:

**7:30 – 8:00 Registration and Continental Breakfast**

**8:00 – 8:20 Welcome and Introduction**

*Richard Bizzozero, Acting Director, Office of Technical Assistance and Technology (OTA)*  
*Philip Griffiths, Undersecretary for Environmental Affairs, Executive Office of Energy and Environmental Affairs*  
*Laurie Burt, Commissioner, Massachusetts Department of Environmental Protection*

**8:20 – 8:30 Survey Results and Workshop Review**

*Rick Reibstein, Senior Environmental Analyst, OTA*  
*Morgan Mibok, Chemist and Nanotechnology Sector Lead, OTA*

**8:30 – 8:50 Historical Perspective from Industry**

*F. Mark Modzelewski, Vice President of Strategic Opportunities, NanoDynamics*

**8:50 – 9:20 The Science of Nanosafety**

*Andrew Maynard, Ph.D., Chief Scientist, Woodrow Wilson Institute*

**9:20 – 9:40 Current Industry Perspective**

*Aatish Salvi, Vice President, NanoBusiness Alliance*

**9:40 – 10:10 Policy Overview**

*Martin Spitzer, former Professional Staff, House Committee on Science*

**10:10 – 10:20 Break**

**10:20 – 10:50 Systematic Approaches to Risk Assessment**

*Jo Anne Shatkin, Ph.D., Managing Director, CLF Ventures*

**10:50 – 11:15 Best Management Practices for Risk Management – The National Lab BMPs**

*Steve Hoey, EHS Manager, Center for Functional Nanomaterials, Brookhaven National Laboratory*

**11:15 – 12:30 Panel and Open Discussion on Risk Assessment Frameworks and BMPs : Scope, Cost, Practicability, Stages, and Resources for Implementation**

*Michael Ellenbecker, Ph.D., Director, Toxics Use Reduction Institute*  
*Igor Linkov, Ph.D., Managing Scientist, Intertox*  
*Kyle Cahill, Corporate Partnerships Program Manager, Environmental Defense*  
*Matthew Hull, Founder and President of NanoSafe, Inc.*

**12:30 – 1:30 Lunch**

**1:30 – 1:50 Risk Concerns As A Hurdle To Commercialization**

*Michael Holman, Ph.D., Senior Analyst, Lux Research*

**1:50 – 3:00 Topical Discussion Sessions**

Each discussion will focus on two uses of nanomaterials in commercial production and/or later stage development. Industry representatives are encouraged to share their own practices and to offer ideas and concerns regarding risk assessment and management for the industry.

- Workplace Safety  
*Discussion Leader: Dr. Charles Geraci, Coordinator, Nanotechnology Research Center and Chief, Document Development Branch, NIOSH*

- Facility Discharges and Emissions:  
How do you manage something that is hard to measure?  
*Discussion Leader: Ed Kunce, Deputy Commissioner-Operations, MassDEP*

- Product Safety and Disposition  
*Discussion Leader: Seth Coe-Sullivan, Ph.D., Founder and Chief Technology Officer, QD Vision*

**3:00 – 3:30 Reports from Breakout Sessions**

**3:30 – 3:45 Break**

**3:45 – 4:30 Next Steps and Concluding Remarks**

*Discussion Leader: Diane J. Mundt, Ph. D., Senior Manager, ENVIRON*

- What are industry's most pressing concerns regarding environmental, health, and safety risks?
- Can government address some of industry's concerns and/or help to level the playing field with respect to risk assessment and management?
- How can we work together to develop the capacity we need to ensure the safe development of nanotechnology?

## For Additional Information:

Contact: Sue Lanza, [susan.lanza@state.ma.us](mailto:susan.lanza@state.ma.us) or 617-626-1068

**As Space is Limited, Please RSVP  
By November 9, 2007**

[http://www.mass.gov/envir/ota/events/ota\\_events.htm](http://www.mass.gov/envir/ota/events/ota_events.htm)